Improve the Mobility of People, Goods, Information and Energy
Tollgate #2

Mobility of People and Goods

1. Map of Causal Factors

See attachment

2. Assess the performance progress in this result area-update (New information since Tollgate #1 only)

There are tremendous pressures on our state's transportation system, from chronic traffic congestion and exhausted system capacity, to preservation and maintenance needs that will take tens of billions of dollars and decades to remedy. Combined with these facts are demographic and economic trends that indicate major growth in population, traffic, and economic activity. Last year's $4.2 billion 10-year transportation improvement package will pay for some capacity improvements, but even $4.2 billion is small compared to the cost of future system challenges.

According to the Blue Ribbon Commission on Transportation (1998-2000), there is $150 billion in transportation needs across the state over the next 20 years. Current revenues will cover approximately $55 billion, and some $40-50 billion could be avoided through efficiencies, transportation demand management, and other strategies. This still leaves close to $50 billion in unmet transportation needs, many of which (like the Alaskan Way Viaduct, 520 Bridge, and I-5 bridges across the Columbia River) must be replaced.

Given this situation, priority must be given to the fundamental responsibilities of preserving and maintaining the existing system, and optimizing its use—to squeeze as much capacity out of the existing system as possible. Since it is unlikely that the state will receive enough revenue to significantly expand the capacity of the system, what options do we have to focus more attention on the left side of the strategy map and get more out of the existing system?

3. Propose high-level purchase strategies for this result area. What are the key areas where the state should take action, and how (if known at this point)?

We need to "purchase" a strategy that recognizes that our capital requirements are far beyond our revenue resources. This strategy must focus on reducing the estimated cost for meeting our transportation needs over the next 20-30 years by optimizing the efficient use of the existing system, utilizing more resources to maintaining and preserving the system, and further reducing the estimated unmet need of $50 billion. Therefore, our high-level purchase strategies should:

- Focus dollars on preserving key components of the existing system.

- Give priority to investments and purchase activities that optimize the use of the existing system and ensure safe travel.

- Create financing tools and strategies that can pay for and schedule the "mega projects" so sufficient financing is available to pay for each project without cannibalizing preservation or evading system optimization tools.

- Where possible, link the price to the service so users (travelers) can make informed choices. This will provide federal, state, local governments and private organizations with information on what the users want, when they want it and how much they are willing to pay.

4. Provide guidance to agencies for budgets, analysis and legislation

A. Identify operational or legal barriers to the implementation of the high-level strategies.

- Existing preservation funding (state and local government) is not sufficient to maintain existing roads, ferries, and bridges when maintenance costs are lowest.

- The 2003 transportation revenue package focused on adding capacity, with little to no funding for maintenance or preservation.

- The Regional Transportation Improvement District (our current tool for funding and building "mega projects") does not have the authority to provide funding for preservation.

- Existing authority for key activities such as transportation planning, providing transit services, and funding road construction is dispersed amongst many organizations, thereby making coordination inefficient and difficult.

- The political process for increasing tax revenue strongly favors building new projects and adding capacity, not preservation or activities that optimize the use of the existing system.

B. Identify opportunities to reduce the price or improve the efficiency of current services.

Pursue the purchase strategies identified in section 3.

C. Identify new initiatives and areas of budget focus that should be pursued based on Tollgate #1 and #2 analysis.

We need tools to evaluate the trade-offs between making investments in optimizing the existing system and adding capacity around specific corridors in order to understand how to make these trade-offs.

D. Identify specific research projects and budget proposals that may aid the team's development of the detailed purchase plan in the fall.

1. If WSDOT increased spending on the activities that optimize use of the existing system, which combination of activities would maximize mobility?

    a. Would any state policies and laws have to be changed so we get the greatest result from those activities?

    b. How would we measure our performance?

2. What do we need to know to answer the following question:

    a. When do we reach the point of diminishing returns for financial investments in the activities that optimize use of the current system? How much is enough?

3. What is the current backlog of preservation and maintenance projects for WSDOT? For cities and counties? What would it cost to complete the work if all of the work was scheduled to start in the 2005-07 biennium? When would the work be completed? What would it cost to complete the work if the work was phased over ten or more years, starting with the 2005-07 biennium?

4. Which areas of the state and which corridors would benefit most if we focused additional resources on optimizing the use of the existing system?

5. Create scenarios using existing projects and corridors that demonstrate the key variables that decision-makers need to focus on to make the trade-off between optimizing the existing system and adding capacity. Rank these scenarios according to those that provide the most mobility of people and goods for the least cost and in the least amount of time.

Mobility of Information

1. Map of Causal Factors

See attachment

2. Assess the performance progress in this result area-update (New information since Tollgate #1 only)

See response to Tollgate #1.

3. Propose high-level purchase strategies for this result area. What are the key areas where the state should take action, and how (if known at this point)?

While universal access to affordable telecommunications service is a longstanding state policy, codified in state law (80.36.300), telecommunications and information services in Washington State are provided in almost all cases by private companies. The state, therefore, has four basic roles in telecommunications and information policy:

- First, the state must ensure that telecommunications markets operate in a way that promotes full and fair competition, which in turn leads to lower prices, better service, and technical innovation. The state must be proactive in eliminating regulation where competition is effective, in part because regulation shields companies from consumer protection laws.

- Second, where competitive markets have not developed, the state must regulate those private telecommunications services that fall under state authority to ensure universal service, service quality, and fair, just, and reasonable prices.

- Third, the state can use its power as a large purchaser and user of telecommunications and information services to make strategic purchases that drive private investment to underserved areas.

- Fourth, the state taxes telecom services as a source of general fund revenues.

- Fifth, the state authorizes excise taxes on phone bills to fund assistance to citizens who lack the means to purchase affordable basic telecommunications services.

Only the third and fourth item has significant general fund impacts, and even here, the level of funding for state-purchased services (e.g., K-20 educational network and state government networks) is driven by the need identified for particular services, not the collateral benefits of strategic purchasing to widespread deployment of infrastructure.

As for the other items, rate regulation of telecommunications companies are paid through assessments to the companies regulated by the WUTC. Universal service and telephone assistance programs are funded through telephone rate structures (cost averaging) or excise taxes on telephone bills.

The deployment of telecommunications infrastructure has been steady. The K-20 Network now connects 296 of 298 public K-12 school districts, educational service districts, community colleges and four-year institutions. New private infrastructure investment in urban areas has been slow due to current over-capacity. Public utilities in rural areas have made huge investments in telecommunications infrastructure following 2000 legislation giving them authority to provide wholesale services.

The primary challenge in regulating telecommunications companies in the near future is ensuring that laws and regulations keep up with changes in technology. For example, how will widespread VOIP (voice-over-Internet protocol) services affect the ability of regulated companies to recover investments in infrastructure, where revenues were assumed to come from switched access lines? While these are critically important issues, they are not at this time items that require general fund appropriations to resolve.

4. Provide guidance to agencies for budgets, analysis and legislation

C. Identify operational or legal barriers to the implementation of the high-level strategies.

Two areas that will require legislation to address:

Funding for the Washington Telephone Assistance Program is provided in part by a monthly excise tax on each switched access line in Washington. No such excise tax is applied to wireless services. As citizens migrate from wireline to wireless services, the funding base for WTAP has shrunk, and wireline is increasingly at a competitive disadvantage due to the disparity in tax treatment.

Universal service policies in Washington are based on an outdated monopoly service environment that is not sustainable in the developing competitive market. Currently, customers in low-cost areas of the non-rural incumbent telephone companies pay above-cost prices for in-state long-distance services so that every citizen can have access to the telephone network. In 1996, however, Congress embarked on a policy to promote competition. Congress realized that competition would develop largely in low-cost urban areas, and thus erode the base from which high-cost services are subsidized. To ensure that universal service is maintained, the Legislature should establish the degree to which service in high-cost areas should be subsidized and establish a competitively neutral program for collecting and distributing those subsidies, either by assessing high-cost subsidies to all service providers, or through direct general fund appropriations (of roughly $125 million per year).

D. Identify opportunities to reduce the price or improve the efficiency of current services.

Efficiencies in this area are driven primarily by policy, not budget. Some examples include:

- Policies to aggregate purchases by various state agencies, or among state and local governments (K-20, Justice Information Network);
- Requiring standards for interoperability of equipment among law enforcement and others (Statewide Interoperability Executive Committee);
- Consolidation of statewide networks where possible;
- Standardization of equipment and software to promote volume purchasing, facilitate vendor support and equipment maintenance;
- Providing competitively neutral access to state rights of way to private telecommunications companies for infrastructure deployment (to promote economic development, public safety).

C. Identify new initiatives and areas of budget focus that should be pursued based on Tollgate #1 and #2 analysis.

None at this time.

D. Identify specific research projects and budget proposals that may aid the team's development of the detailed purchase plan in the fall.

While basic telephone service is almost ubiquitous throughout the state, largely as the result of universal service policies, the availability of broadband services is more difficult to gauge. Yet the availability of broadband services is essential to many businesses, health care providers, and citizens. Identifying those communities where services are not provided, or where costs for such services are prohibitive, is a necessary first-step to developing targeted strategies to promote broadband deployment.

Attempts by legislative staff and others to map advanced infrastructure in the state have been frustrated by providers' resistance to revealing proprietary or sensitive information. We are discussing within our group how best to collect data for particular urban and rural communities that would provide a general picture of a community's connectedness. This might include a survey of representative communities to determine available services, their costs, and comparisons with services available in communities with similar demographics.

Mobility of Energy

1. Map of Causal Factors

See attachment.

2. Assess the performance progress in this result area-update (New information since Tollgate #1 only)

The state's fundamental mission in the area of energy services is to ensure citizens and businesses access to affordable energy sufficient to meet their needs. Fulfilling this mission requires attention to increasing supply, reducing demand through system efficiencies and consumer education, and to ensuring that the transmission and distribution infrastructure is sufficient to deliver energy safely to consumers. Sufficient and affordable energy is vital to our state's economic and public health, but energy production and distribution can adversely impact the environment. Public policy must balance these tensions and strive to ensure that investments in needed energy generation and infrastructure minimize adverse impacts to the environment and other public values.

Energy services in Washington are provided by private investor-owned utilities (IOUs) and publicly owned utilities such as public utility districts, municipal utilities, and rural cooperative associations. In addition, the federal Bonneville Power Administration (BPA) generates and sells to public and private utilities about 60 percent of the electricity used in Washington. The state regulates IOUs through the Washington Utilities and Transportation Commission (WUTC); public utilities are authorized by statute but not regulated by the state. The BPA falls under the administration of the federal Department of Energy.

According to the Northwest Power and Conservation Planning Council (Power Council), energy supplies are sufficient to meet demand in the Northwest for the near future, even as the region faces another low-water year that will limit hydropower production. Current low demand is due primarily to the shutdown of aluminum smelters. However, long-term strategies are needed to ensure that sufficient investments in energy production and transmission are made on a timely basis to meet anticipated future demand.

The WUTC requires privately owned utilities to prepare on a biennial basis "Least-Cost Plans." In these plans, utilities project load over the next twenty years, and identify the portfolio of new resources that will satisfy the projected load grow at the least-cost given a variety of contingencies (low snow pack, drought, high natural gas prices). New resources include thermal and renewable generating plants as well as demand response measures and conservation/efficiency programs. While there is no similar requirement for public utilities, most conduct some level of planning. Prior to constructing any new large thermal power plants (and wind, if requested by the developer) a developer must obtain siting approval from the Energy Facility Site Evaluation Council (EFSEC). Other, smaller plants require approval from the county government.

Energy prices have increased for most utilities since the California energy crisis of 2001, as utilities and BPA are still paying for high-cost power or generating facilities (for example, diesel generators) purchased during that period. Reduced snowpack this year is expected to reduce BPA's secondary revenues and therefore keep BPA's rates near current levels. In addition, volatile natural gas prices will put added pressure on electricity rates for some utilities.

3. Propose high-level purchase strategies for this result area. What are the key areas where the state should take action, and how (if known at this point)?

1. Direct or encourage all load-serving entities to adopt and implement integrated resource plans to ensure they have adequate resources to meet their obligation to serve their customers' projected long-term energy and capacity needs.

2. Encourage the development of a balanced and environmentally sound resource portfolio that includes cost-effective conservation and renewables (e.g., wind, geothermal, hydro, biomass, and solar technologies), as well as least-cost conventional resources.

3. Preserve the benefits of service from the Federal Columbia River Power and Transmission System for Washington consumers. . To this end, continue to aggressively counter federal efforts in the areas of mandatory "Standard Market Design" and mandatory "Regional Transmission Organizations" while at the same time working in support of federal efforts to establish reasonable reliability standards.

4. Preserve and promote Washington's cost-based energy system to benefit the end-use consumer by providing reliable power and reduce consumers' vulnerability to supply shortage and price volatility.

5. Encourage utilities, BPA and others as they work to reduce congestion and improve the reliability of the transmission system, to assess all potentially practicable and cost-effective alternatives, including but not limited to targeted demand reductions, generation additions, system upgrades, and new line construction.

6. Foster a predictable and stable investment climate to facilitate adequate and efficient access to capital markets for independent power producers, federal agencies and Washington's public and private energy industry.

7. Streamline the lead-time for siting and permitting new energy facilities. EFSEC should continue to develop clear and concise siting standards.

8. Promote Washington State as a leader in clean energy technologies by supporting and attracting companies active in developing, manufacturing and selling these

technologies. In addition, lead by example with clean energy, energy efficiency, and sustainable practices in state and local government operations.

4. Provide guidance to agencies for budgets, analysis and legislation

E. Identify operational or legal barriers to the implementation of the high-level strategies.

The federal government's attempts to assume jurisdiction over bundled utility services and transmission has created uncertainty in markets, which in turn discourages investment, weakens consumer protections, and puts at risk the local utilities' ability to serve native load. The state – including the WUTC and the Governor's Office – must continue to play a strong advocacy role on federal energy policy.

Unlike private utilities, public utilities are not required to prepare least-cost plans (also called "integrated resource plans), plans that can determine the best mix of resources in a utility's portfolio to hedge against high costs given a variety of contingencies (low snow pack, drought, high natural gas prices). Legislation requiring such planning by public utilities should be considered.

F. Identify opportunities to reduce the price or improve the efficiency of current services.

The Power Council is preparing a study on the potential benefits of coordinated energy conservation measures by BPA and Northwest utilities. Preliminary findings of that study show that available conservation in the region can provide the equivalent of 150 aMW per year over 20 years, thereby avoiding the need for significant new power plant construction for eight years or more. The state, through the Governor, his appointees on the Power Council, and the CTED Energy Division, should advocate such coordinated planning and implemented conservation measures when cost-effective.

The state should encourage utilities to develop time-of-day, critical peak pricing or other demand reducing pricing strategies for electricity where these strategies are both beneficial and cost-effective.

The state should actively promote energy technology industries in Washington. The Governor should continue to provide executive sponsorship and seed funding to the Northwest Energy Technology Collaborative.

The Governor has encouraged the Building Code Council to review the current energy code and adopt stronger cost-effective energy efficiency requirements in new buildings, thereby reducing energy demand.

The state should develop energy efficiency standards for appliances where products are cost-effective and widely available at market.

C. Identify new initiatives and areas of budget focus that should be pursued based on Tollgate #1 and #2 analysis.

EFSEC is funded through assessments of current site certificate holders and applicants. By law, EFSEC may not use these fees for prospective rulemaking. If EFSEC is to move away from ad hoc negotiations with individual applicants and develop clear rules, the law must be changed to provide a general fund or revolving fund mechanism must be established to allow EFSEC to develop rules.

Energy resource, policy, and regulatory issues are increasingly complex and interconnected topics requiring multi-state, regional, and federal coordination and involvement. It is critical that the state be in a position to participate, influence, and interact at all these levels. It is essential that the WUTC have the capacity and funding to provide policy leadership and advocacy on behalf of Washington electricity consumers in these forums.

D. Identify specific research projects and budget proposals that may aid the team's development of the detailed purchase plan in the fall.

No new projects or funding other than those listed above are identified at this time. Research in the areas of energy supply and demand are currently performed on a regional basis by the Northwest Power Planning Council. This informs both the WUTC and local utility planning. In addition, the CTED Energy Division is required by law to prepare a biennial report on trends related to energy supply, demand, and efficiencies. The next report is due in early 2005.